## AMENDMENTS TO THE CLAIMS

*The listing of claims will replace all prior versions and listings of claims in the application:*

**Listing of Claims:**

1. – 3. **(Canceled)**

4. **(Currently Amended)** A transceiver module comprising:

a laser diode;

a laser driver coupled to the laser diode;

a microprocessor coupled to the laser driver;

memory coupled to the microprocessor, the memory comprising a reference operating characteristic of the laser diode; ~~and~~

wherein the microprocessor is adapted to collect periodic operating characteristics of the laser diode and to compare the periodic operating characteristics of the laser diode to the reference operating characteristics of the laser diode; and

wherein the laser diode and laser driver are arranged such that the laser driver can bias the laser diode through two alternate paths.

5. **(Original)** The transceiver module of claim 4, wherein the memory comprises an electronically erasable programmable read only memory.

6. **(Original)** The transceiver module of claim 4, wherein the reference operating characteristics of the laser diode are stored as quadratic spline coefficients.

7. **(Original)** The transceiver module of claim 4, wherein the reference and periodic operating characteristics of the laser diode comprise current/voltage characteristics.

8. **(Original)** The transceiver module of claim 4, wherein the reference and periodic operating characteristics of the laser diode comprise current versus optical power characteristics.

9. **(Original)** The transceiver module of claim 4, wherein the microprocessor is further adapted to store the periodic operating characteristics of the laser diode in the memory.

10. **(Original)** The transceiver module of claim 4, wherein the microprocessor is further adapted to store the periodic operating characteristics of the laser diode in the memory as cubic spline coefficients.

11. **(Currently Amended)** A transceiver module comprising:

a laser diode;

a laser driver coupled to the laser diodc;

a microprocessor coupled to the laser driver;

memory coupled to the microprocessor; and

wherein the microprocessor is adapted to:

collect periodic operating characteristics of the laser diode at various times;

store the collected periodic operating characteristics of the laser diode in the memory; ~~and~~

compare the periodic operating characteristics of the laser diode collected at least two different times to detect damage to the laser diode; and

wherein the microprocessor is further configured to record the periodic operating characteristics as cubic splines to the memory.

12. **(Original)** The transceiver of claim 11, wherein the periodic operating characteristics comprise current/voltage characteristics.

13. **(Original)** The transceiver of claim 11, wherein the periodic operating characteristics comprise current versus optical power characteristics.

14. **(Original)** The transceiver of claim 11, wherein the microprocessor is further configured to set a fault flag when damage to the diode is discovered.

15. **(Original)** The transceiver of claim 11, further comprising a communications connector adapted to couple to an electronic component, the microprocessor further configured to notify an electronic component connected to the communication connector when damage to the diode is discovered.

16. – 21. **(Canceled)**

22. **(Previously Presented)** The transceiver module as recited in claim 4, further comprising:

a pair of switches arranged to selectively couple both the laser driver and the microprocessor to the laser diode; and

first and second external test pins coupled to respective first and second sides of the laser diode, the first and second external test pins arranged so as to be in communication with the laser diode regardless of whether the switches are open or closed.

23. **(Previously Presented)** The transceiver module as recited in claim 22, wherein when both switches are open, both the laser driver and the microprocessor are uncoupled from the laser diode.

24. **(Canceled)**

25. **(Previously Presented)** The transceiver module as recited in claim 24, wherein one of the paths includes a pair of switches arranged to enable selective coupling of the laser driver to the laser diode.

26. **(Previously Presented)** The transceiver module as recited in claim 4, wherein the laser diode comprises an oxide laser.

27. **(Currently Amended)** ~~The transceiver module as recited in claim 4,~~ A transceiver module comprising:

a laser diode, wherein the laser diode comprises a vertical cavity surface emitting laser (VCSEL);

a laser driver coupled to the laser diode;

a microprocessor coupled to the laser driver;

memory coupled to the microprocessor, the memory comprising a reference operating characteristic of the laser diode; and

wherein the microprocessor is adapted to collect periodic operating characteristics of the laser diode and to compare the periodic operating characteristics of the laser diode to the reference operating characteristics of the laser diode.

28. **(Currently Amended)** A method for screening optical transceiver modules for electrostatic discharge damage, the method being performed in connection with an optical transceiver module that includes a laser diode, and the method comprising:

defining reference operating characteristics of the laser diode;

storing the reference operating characteristics of the laser diode, wherein the reference operating characteristics are stored as quadratic spline coefficients;

periodically collecting operating characteristics of the laser diode;

comparing the collected operating characteristics of the laser diode with the reference operating characteristics of the laser diode; and

if damage to the laser diode is discovered, setting a fault flag.

29. **(Canceled)**

30. **(Currently Amended)** ~~The method as recited in claim 28,~~ A method for screening optical transceiver modules for electrostatic discharge damage, the method being

performed in connection with an optical transceiver module that includes a laser diode, and the method comprising:

defining reference operating characteristics of the laser diode;

storing the reference operating characteristics of the laser diode, wherein the periodically collected operating characteristics of the laser diode are stored as cubic spline coefficients;

periodically collecting operating characteristics of the laser diode;

comparing the collected operating characteristics of the laser diode with the reference operating characteristics of the laser diode; and

if damage to the laser diode is discovered, setting a fault flag.

31. **(Previously Presented)** The method as recited in claim 28, wherein the periodically collected operating characteristics of the laser diode comprise current/voltage characteristics.

32. **(Previously Presented)** The method as recited in claim 28, wherein the periodically collected operating characteristics of the laser diode comprise current versus optical power characteristics.

33. **(Previously Presented)** The method as recited in claim 28, wherein the periodically collected operating characteristics of the laser diode are collected when a forward bias voltage is applied to the laser diode.

34. **(Previously Presented)** The method as recited in claim 33, wherein the periodically collected operating characteristics of the laser diode comprise at least one of: cut-in voltage; and, forward threshold voltage.

35. **(Previously Presented)** The method as recited in claim 28, wherein the periodically collected operating characteristics of the laser diode are collected when a reverse bias voltage is applied to the laser diode.

36. **(Previously Presented)** The method as recited in claim 35, wherein the periodically collected operating characteristics of the laser diode comprise at least one of: breakdown voltage; reverse bias knee; and, reverse threshold voltage.

37. **(Previously Presented)** The method as recited in claim 28, wherein periodically collecting operating characteristics of the laser diode comprises:

varying a voltage across the laser diode; and

measuring a current through the laser diode.

38. **(Previously Presented)** The method as recited in claim 28, wherein at least a portion of the method is performed in response to the occurrence of a predefined event.

39. **(Previously Presented)** The method as recited in claim 28, further comprising performing a polling routine in response to a setting of the fault flag.

40. **(Previously Presented)** The method as recited in claim 28, wherein after a calibration of a laser driver associated with the laser diode is performed, current/voltage characteristics of the laser diode are measured by sweeping each section of an I-V curve while controlling the DC bias on the laser diode.